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GenCore version 4.5
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OM protein - protein search, using sw model

Run on:
January 30, 2002, 11:50:30; Search time 27.34 Seconds (without alignments)
72.441 Million cell updates/sec Perfect score: 183
Sequence:
US-09-432-546-6
Perfect score: 183
Sequence:
1 RRWPWWPWKWPLIGGGYDPAPPPPPP 26
Scoring table: BLOSUM62
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Total number of hits satisfying chosen parameters:
Minimum DB seg length: 0
Maximum DB seg length: 2000000000

Gapop 10.0 , Gapext 0.5 219241 seqs, 76174552 residues

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: PIR_68:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIE

29	6	6		2 0) A) K	2 6) k	20	19	18	17	16	15	14	13	12	11	10	6	8	7	6	·	6	· (41)	2 7	, L	Result No. Sc	
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106	684	445	856	776	584	502	144	137	304	172	1404	1137	691	650	534	148	1662	1171	10	160	969	209	196	142	221	172	248	161	Length	
د	N	N	N	Ν	Ν	N	-	N	ν	ν	N	Ν	N	Ν	N	N	N	N	N	N	N	N	N	N	N	2	N	Ν	BB	
1000	A56154	S19990	T13159	S45495	B84668	T08776	JC1222	T22308	A32993	D41132	E85509	A86335	T46476	T04487	S21961	S39206	54	S.	A36454	ω	T15446	23	823	T51039	~1	T27505	44	E48232	ID	
	Abl substrate		E1B-55kDa-ass	isp4 prote	ethylene-insensiti	hypothetical	indolicidin	hypothetica	transcription	collagen-re	hypothetical	hypothetica	hypothetica	hypothetica	proline-rich	prolipe-rich	mofa protein	diaphanous-rela:	trungin-mod	cysteine-rich	hypothetical	Cysteine-rich	Ρ.	5	extensin homolog	hypothetical	Hoxida	Cysteine-ric	scriptio	

R;Park, H.J.; Kreutzer, R.; Reiser, C.O.A.; Sprinzl, M.
Eur. J. Blochem. 205, 875-879, 1992
A;Title: Molecular cloning and nucleotide sequence of the gene encoding a H(2)O(2)-fo A;Reference number: S23449; MUID:92249331
A;Recession: S23449; MUID:92249331
A;Residues: 1-248 <PARN
A;Residues: 1-248 <PARN
A;Cross-references: EMBL:X60110
A;Accession: S24556
A;Molecula type: protein
A;Residues: 1-32 <PARN>
A;Residues: 1-32 <PARN>

NADH oxidase (H2O2-forming) (EC 1.6.-.-) - Thermus aquaticus C;Species: Thermus aquaticus C;Species: Thermus aquaticus C;Date: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 23-Mar-1993 C;Accession: S23449; S24556

C; Keywords: NAD; oxidoreductase

C; Genetics: A; Gene: nox

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•	hypothetical prote	probable metal bin		probable metal hin	GTPase-activating	-		qlycoprotein homol	hypothetical prote	THE PERSON NAMED IN COLUMN TO PERSON NAMED I		hypothetical prote	Tomor Cara Cara	vov protein - hims	gene X protein - h	ning - uracord vdv		vpu protein - simi	PITOLOGIC		vpu protein - huma	AT OCCUTE	wnn protein - huma

ALIGNMENTS

Qy 3 WPWWPWKWPLIGGGYDPAPDPPPP 26	Query Match 42.1%; Score 77; DB 2; Length 161; Best Local Similarity 43.8%; Pred. No. 0.075; Matches 14; Conservative 2; Mismatches 2; Indels 14;	F; 22-160/Product: cysteine-rich extensin-like protein 5 #status experimental <mat></mat>	C;Superiamily: glutelin C;Keywords: cell wall; extracellular matrix; fertilization; glycoprotein F;1-21/Domain; signal sequence #status predicted /crc	C;Genetics: C;Genetics: A;Gene: CELP-5	A;Status: preliminary A;Molecule type: DNA A;Residues: 1-161 <wud> A;Residues: 1-261 <wud></wud></wud>	A; Reference number: A48232; MUID: 93342083	R;Wu, H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y. Proc. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993 A;Title: A tobacco gene family for flower cell wall proteins with a proline with a	<pre>C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 17-Nov-2000 C;Accession: E48232</pre>	<pre>cysteine-rich extensin-like protein 5 precursor - common tobacco C; Species: Nicotiana tabacum (common tobacco)</pre>	RESULT 1 E48232
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hypothetical protein ZC168.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:AJ003220; NID:e1251331; PIDN:CAA06000.1; PID:e1251332 A;Experimental source: cv. Record; swelling stolon C;Superfamily: glutelin
                                                                                                                                                                                                                                                                                                                                                                                                                                   submitted to the EMBL Data Library, December 1997 A; Reference number: Z15977 A; Accession: T07176
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A; Accession: T27505
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Solanum tuberosum (potato)
C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 17-Nov-2000
C;Date: 307-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 17-Nov-2000
C;Accession: T07176
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A; Introns: 112/3
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A; Residues: 1-172 <WIL>
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                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-221 <MAC>
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related to extensin precursor [imported] - Neurospora crassa \mathbf{N}; Alternate names: protein \mathbf{B15120.90}
                                                            RESULT
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                                                                                                                                                                                                                              Local Similarity
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                                                                                                                             24
                                                                                                                                                                  3 WPW------WPWKWPLIGGGYD------PAPPPPPP 26
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                                                                                                                             WPWEIPCYLPWPFPFP---RPYPCPPPKPRPSPPPPPP 58
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Similarity 44.1%;
15; Conservative
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                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                              37.4%; Score 68.5; 36.8%; Pred. No. 0.
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Pred. No. 0.46;
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R;WU, H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y.

Proc. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993
A;Title: A tobacco gene family for flower cell wall proteins with a proline-rich doma A;Reference number: A48232; MUID:93342083
A;Accession: B48232
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A; Accession: T51039
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C;Date: 21-Jul-2000 #sequence_revision 21-Jul-2000 #text_change 21-Jul-2000
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A; Residues: 1-142 <SCH>
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C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 01-Dec-2000
C;Accession: B48232; PQ0474; S24616
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                                                                                                                                                                                                                                                C;Superfamily: glutelin
C;Keywords: cell wall; extracellular matrix; fertilization
C;Keywords: cell wall; extracellular matrix; fertilization
F;1-19/Domain: signal sequence #status predicted <SIG>
F;1-19/Domain: signal sequence #status protein 2 #status experimental <MAT>
F;20-196/Product: cysteine-rich extensin-like protein 2 #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
A; Residues: 'MAG', 1-105 <GOL>
A; Cross-references: EMBL: 214014
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  40 WPWEIPCYLTWPFPWP-----PPPPWP 61
                                                                                                           Local Similarity nes 12; Conserv
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                                                    3 WPW-----WPWKWPLIGGGYDPAPPPPPP 26
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                                                                                                           Conservative
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42.9%;
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38.7%;
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Pred. No. 0.63;
                                                                                                             1; Mismatches
                                                                                                                                        Score 68;
Pred. No.
                                                                                                                                             0.88;
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cysteine-rich extensin-like protein 1 precursor - common tobacco
C;Species: Nicotiana tabacum (common tobacco)
C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 01-Dec-2000
C;Accession: A48232; PQ0475; S24617

RESULT A48232

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31 11:07:43 2002

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C;Species: Nicotiana tabacum (common tabacco)
C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 17-Nov-2000
C;Accession: D48232
                                   R;Wu,
                                                                                                                        cysteine-rich extensin-like protein 4 precursor - common tobacco (fragment)
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A;Residues: 39-209 <GOL>
A;Residues: 39-209 <GOL>
A;Cross-references: EMBL:Z14020; NID:g19918; PID:g19919
A;Experimental source: stigma, style; strain Petit Havana SR1
C;Superfamily: glutelin
C;Keywords: cell wall; extracellular matrix; fertilization; glycoprotein
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-209/Product: cysteine-rich extensin-like protein 1 #status experimental <MAT>
F;146/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Introns: 110/3; 149/2; 515/1; 564/1; 600/2; 690/2; 755/3; 843/3; 884/3; 940/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-969 < HAW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: Z18352
A; Accession: T15446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           submitted to the EMBL Data Library, May 1996 A:Description: The sequence of C. elegans cosmid CO7G1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999 C;Accession: T15446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein C07G1.4 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plant Cell 4, 1041-1051, 1992

A;Title: Developmental expression of tobacco pistil-specific genes encoding novel extens A; Reference number: PQ0474; MUID:93005740

A;Accession: PQ0475

A;Accession: PQ0475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Experimental source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R; Hawkins,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Species: Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Gene: CESP: C07G1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: EMBL:U58751; NID:g1326379; PID:g1326381; PIDN:AAB00657.1; GSPDB:GN00A;Experimental source: strain Bristol N2; clone C07G1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-209 <WUA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R:Wu, H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y.
Proc. Natl. Acad. Scl. U.S.A. 90, 6829-6833, 1993
A;Title: A tobacco gene family for flower cell wall proteins with a proline-rich domain A;Reference number: A48232; MUID:93342083
A;Accession: A48232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 12;
H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993
                                                                                                                                                                                                                                                                  799 PMGLPAVGAGAPPPPPPPPP 818
                                                                                                                                                                                                                                                                                                                                                                                                Match 37.2%;
Local Similarity 55.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                      7 PWKWPLIGGGYDPAPPPPPP 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 WPW-----WPWKWPLIGGGYDPAPPPPPP 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                          Conservative
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    Mismatches

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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
4.6;
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A; Reference number: Z18796
A; Accession: T17454
                                                                                                                             R;Tominaga, T.; Sahai, E.; Treisman, R.H.; Alberts submitted to the EMBL Data Library, September 1998
                                                                                                                                                                                                                                                 C;Species: Mus musculus (house mouse)
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                   C; Accession: T17454
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: protein
A;Residues: 1-10 <50C>
A;Residues: 1-10 cype:
R;Borovsky, D.; Carlson, D.A.; Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.
Insect Biochem. Mol. Biol. 23, 703-712, 1993
A;Title: Mass spectrometry and characterization of Aedes aegypti trypsin modulating o
A;Reference number: A61630; MUID:93357794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein A; Residues: 1-10 <BO2>
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C;Superfamily: glutelin
C;Keywords: cell wall; extracellular matrix; fertilization; glycoprotein
C;Keywords: cell wall; extracellular matrix; fertilization; glycoprotein
F;1-17/Domain: signal sequence #status predicted <SIG>
F;18-159/Product: cysteine-rich extensin-like protein 4 #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Note: none of the amino acids is modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Reference number: A36454; MUID:90367888 A;Accession: A36454
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A; Note: authors failed to translate the codon GCT for residue 11 as Ala, and GTA for annotes: A; Note: authors translated the codon TCT for residue 60 as Pro, and CCA for residue 50 as Pro, and and AcCA for residue 50 as Pro, and AcCA for residue 50 as Pro, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: A61630
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     trypsin-modulating oostatic factor - yellow fever mosquito C;Species: Aedes aegypti (yellow fever mosquito) C;Date: 12-Apr-191 #sequence_revision 12-Apr-1991 #text_change 24-May-1996 C;Accession: A36454; A61630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A36454
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A; Residues: 1-160 < WUA>
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A;Accession: D48232
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
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Pred. No.
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                                                                                                                                                                                R.H.; Alberts,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2;
0.065;
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A; Residues: 1-1171 <TOM>
A; Cross-references: EMBL.
C; Genetics:
A; Gene: Dia2
                                                                                                                                                                                                                                                                                                                                                                         proline-rich protein V-beta 1 precursor - rat
C.Species: Rattus norvegicus (Norway rat)
C.Species: Rattus norvegicus (Norway rat)
C.C.Bate: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 19-May-2000
C.Accession: A53118; S39206
R.Courty, Y.; Rosinski-Chupin, I.; Rougeon, F.
J. Biol. Chem. 269, 520-527, 1994
A.Filtle: A new proline-rich protein precursor expressed in the salivary glands of the rata. Reference number: A53118; MUID:94103265
A.Rocession: A53118
A.Rocession: A53118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mofA protein precursor [imported] - Leptothrix discophora
C;Species: Leptothrix discophora
C;Date: 02-Sep-2000 #sequence_revision 02-Sep-2000 #text_change 08-Sep-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
T18540
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                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-148 <COU>
A; Cross-references: EMBL: X74229; NID: 9433616; PIDN: CAA52300.1;
A; Note: submitted to the EMBL Data Library, July 1993
C; Genetius:
A; Gene: VCS-betal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R; Corstjens, P.L. submitted to the EMBL Data Library, April 1999
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F;43-1662/Product: mofA protein #status predicted <MAT</pre>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Cross-references: EMBL: 225774; NID: e1427784; PID: e267517; PIDN: CAA81037.1
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                                                                                                A;Introns: 18/3
C;Superfamily: proline-rich peptide P-B
C;Superfamily: proline-rich peptide P-B
C;Keywords: glycoprotein
E;1-18/Domain: signal sequence #status predicted <SIG>
E;19-148/Product: proline-rich protein V-beta 1 #status predicted <MAT>
E;133,143/Binding site: carbohydrate (Asn) (covalent) #status predicted
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A; Residues: 1-1662 <COR>
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A; Accession: T18540
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Best Local
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Matches
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Local Similarity hes 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
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9; Conserv
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62.5%;
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52.9%;
                    35.0%;
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Pred. No.
                    Pred.
                                     Score 64;
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17;
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                                          Length 148;
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Job time:

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Search completed: January 30, 2002, 11:50:31

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C;Accession: S21961
R;Roberts, M.R.; Foster, G.D.; Blundell, R.P.; Robinson, S.W.; Draper, J.; Scott, R.J submitted to the EMBL Data Library, August 1991
A;Description: Cloning and characterization of a proline-rich gene expressed specific A;Reference number: S16748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             proline-rich protein APG - Arabidopsis thaliana
C:Species: Arabidopsis thaliana (mouse-ear cress)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Sep-1997
C:Accession: S21961
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A; Residues: 1-534 < ROB>
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A; Introns: 337/2;
A; Note: F8F16.10
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                                                                                                                                                                                                                                                                 A; Cross-references: EMBL: AL021633
                                                                                                                                                                                                                                                                                                                      A; Reference number: Z15375
A; Accession: T04487
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A; Residues: 1-650 <BEV>
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Best Local
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106 PPFPGPYDSAPPPPPP 121
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                                  11 PLIGGGYDPAPPPPPP 26
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37.5%;
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8.3;
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